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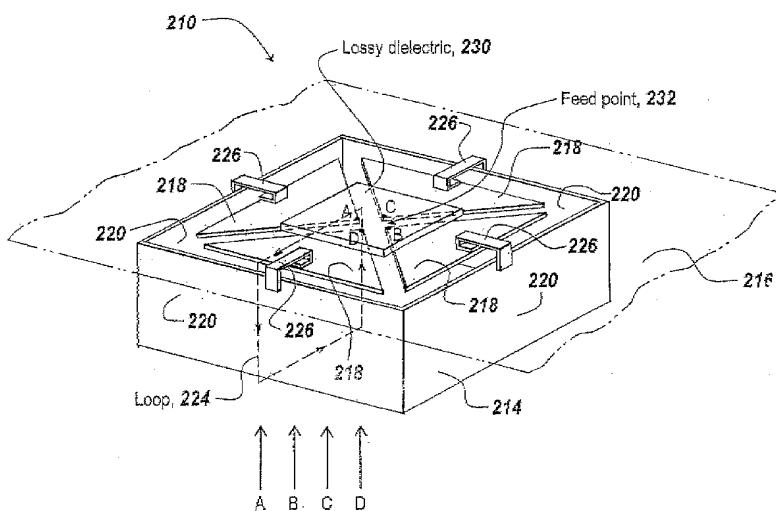
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(54) Title: CAVITY EMBEDDED MEANDER LINE LOADED ANTENNA AND METHOD AND APPARATUS FOR LIMITING VSWR



(57) Abstract: A wideband meander line loaded antenna is configured to be flush mounted to a conductive surface serving as a ground plane by embedding the meander line components within a conductive cavity surrounded at its top edge by the ground plane. The antenna thus looks out of a cavity recessed in the surface. By permitting flush mounting the meander line antenna, not only can the antenna dimensions be minimized due to the use of the meander line loaded antenna configuration, but in aircraft applications no part of the antenna exists above the skin of the aircraft, thereby to minimize turbulent flow. Also disclosed is a method and apparatus in which a lossy dielectric is placed across the feed points of a loop type meander line loaded antenna to markedly decrease the VSWR to below 3:1, thus to increase the bandwidth of a relatively wideband 3:1 meander line loaded antenna to 6:1.

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